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H. G. BALTHASAR

2,296,010

DEVICE FOR VENETIAN BLINDS

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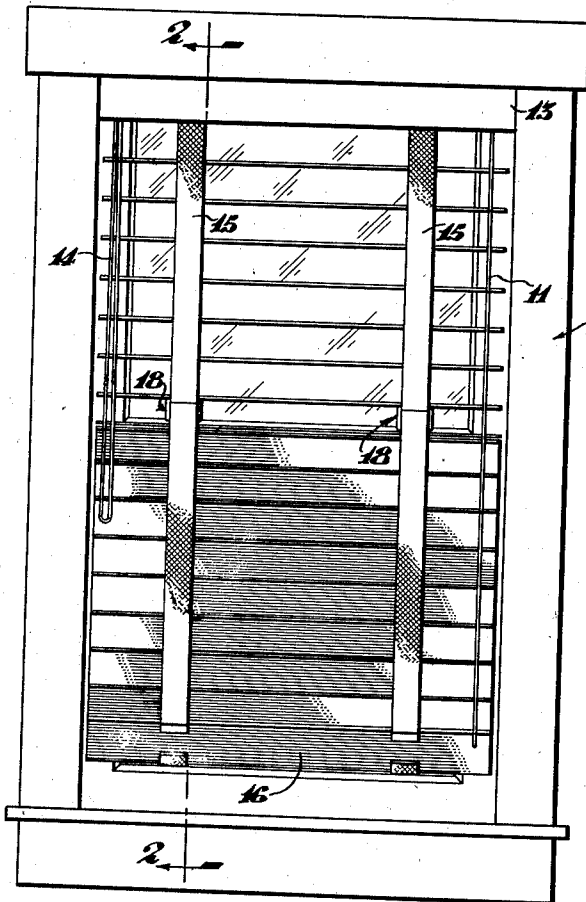


Fig. 1

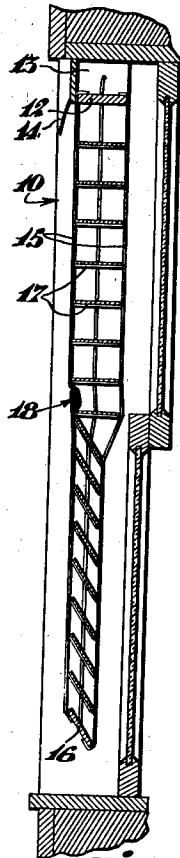


Fig. 2

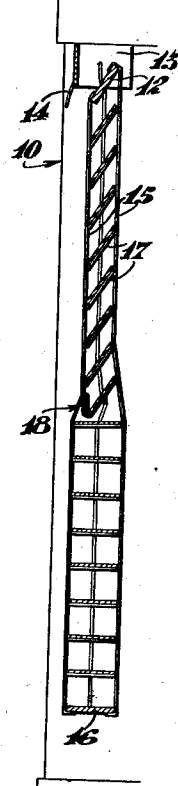


Fig. 3

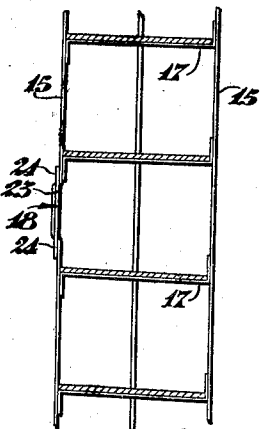


Fig. 4

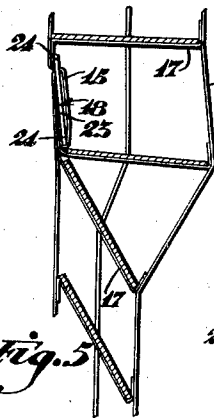


Fig. 5

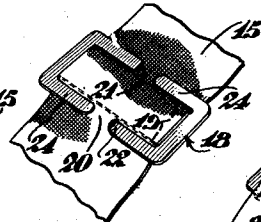


Fig. 6

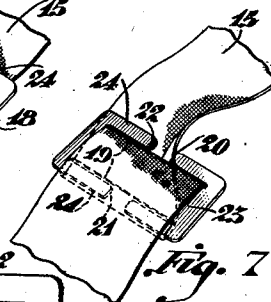


Fig. 7

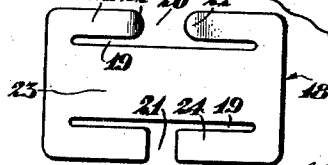


Fig. 8

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DEVICE FOR VENETIAN BLINDS

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2 Claims. (Cl. 156—17)

This invention relates to Venetian blinds and is particularly directed to an improved device for controlling the angular positions of the slats of the blind.

In the operation of the conventional Venetian blind, the user adjusts the angular positions of the slats dependent on the degree of light outside the window or the degree of light desired inside the room. The slats are always disposed in parallelism. Very often it happens that the slats, due to the position of the sun, cannot be arranged so as to give sufficient light in the room without admitting the direct rays of the sun. Also it frequently occurs that the user of the blind is desirous of having a maximum of light and at the same time, wishes to maintain the privacy of the room.

With no opportunity of varying the angle of the slats with respect to each other, the flexibility and adaptability required to satisfy the particular demands has been lacking. There are instances where it would be desirable to have all of the slats, let us say, half way up from the bottom in fully closed or vertically disposed position, whereas, the upper slats are fully open or horizontally disposed. Also, the reverse condition may exist when it is desirable to have the upper part completely closed.

It is therefore the object of the present invention to provide increased flexibility for a Venetian blind whereby the slats may be set at different degrees of inclination relative to each other.

Described more specifically, the invention resides in the conception of a device which permits a complete closing or opening of all slats, or a complete opening of a portion of the slats and closing of the balance, that is, permits the slats in one portion of the blind to be set at different degrees of inclination relative to the slats in the other portion of the blind.

It is a further object of the invention to provide a device for this purpose which is extremely simple, which may be applied to the blind at different positions, and which may be attached to any standard Venetian blind.

It is a further object of this invention to provide a device for use on Venetian blinds which will not interfere with the manipulation of the normal slat tilting means and which will be effective for causing opening of one section while closing another section by manipulation of the normal slat adjusting means.

In connection with this type of device, reference may be had to my previous Patent No. 55

2,115,663, granted April 26, 1938, wherein the device for accomplishing the adjustment of the position of the slats consists of two elements cooperating when attached together to snub the tape. The objectives sought in the mentioned patent and in the present case are the same as above stated with the exception that in this case, the device consists of a single element. Furthermore, it has been the object here to provide a device which will not deface the tapes in any way since it is not necessary to use toothed edges or to use fastening devices engaged through the material of the tapes. Moreover, it has been the object in the present case to provide a device which is substantially hidden from view when in place and which is attached with but very little effort on the part of the user, and wherein, the attachment is greatly simplified, thereby enabling a person unskilled mechanically to attach and adjust the device.

Other objects and further advantages of this invention will be more fully apparent from the description of the accompanying drawing, in which:

Figure 1 is an inside view of a window, illustrating a Venetian blind mounted therein with the device of the present invention applied thereto.

Figure 2 is a sectional view taken on line 2—2, Figure 1, illustrating the device of the invention in operation wherein the lower half of the slats is closed and the upper half is open.

Figure 3 is a view taken similar to Figure 2, but illustrating the reverse condition wherein the lower half is open and the upper half is closed.

Figure 4 is an enlarged fragmentary sectional view illustrating the device in the process of being applied.

Figure 5 is an enlarged view similar to Figure 4, and in which the device has been applied and is in its operating position.

Figure 6 is a perspective view of the device in its first position of application.

Figure 7 is a perspective view of the device showing the final step in the application.

Figure 8 is a plan view of the device.

All slats in the conventional Venetian blind are disposed in parallel relationship as viewed from an end. When the head rail is tilted, this relationship is unchanged. The present device, when applied, changes the relationship of the group of slats constituting the upper half of the Venetian blind with the group of slats constituting the lower half. The slats in both groups still retain their parallel relationship. The

change is in the relationship of the two groups. Thus, when the upper half is open, the bottom half is closed and vice versa.

Referring to the drawing, a window frame is indicated generally at 10. The elevating mechanism of the blind is not shown since it may be of any conventional form operated by means of a cord 11. As shown, an upper rail 12 is provided. This rail is tiltably mounted in the upper support 13 of the blind. Tilting is accomplished by means of a tilting cord 14. Spaced pairs of vertical tapes 15 are provided, the tapes of each pair having their upper ends fixed to the opposite edges of the head rail. The lower ends of these tapes are fixed to the lower rail 16 in the same manner. In accordance with the conventional practice, parallel cross tapes 17 are provided for each pair of vertical tapes, thus forming a structure resembling a ladder for supporting the slats.

Referring to Figure 8 of the drawing, a clip embodying the invention is indicated at 18. The clip has a pair of marginal, longitudinal slots 19—19. The slots are open to the sides of the clip midway as at 20 and 21. These slots are as long as the vertical tapes of the Venetian blind on which they are to be used are wide. The sides of the opening 20 are rounded and bent over in the form of lips 22—22 to facilitate installation, as will be pointed out later. Preferably, each clip is formed by stamping from sheet metal.

The clips are attached to the tapes, one on each tape, at the inside of the blind wherever desirable, as for example, midway of the lengths thereof. The clips are adapted to take up or snub a portion of the tape substantially equal in length to the spacing of the respective slats. This changes the angle of all slats below the clips with respect to all slats above the clips.

The first step in installing the clips is to adjust the tilting mechanism of the blind so that the slats are in the open position, that is, horizontal as viewed from the side. The clips are positioned between two slats near the middle of the blind. Each clip is first attached as shown in Figures 4 and 6. This is done by slipping the tape into the longitudinal slots through the side openings 20 and 21. In this position, the middle body portion 23 of the clip is behind the tape and the arms or fingers 24 of the clip, as defined by the longitudinal slots 19—19, are in front of the tape. The lips 22 on the arms 24 are down and extend outwardly relative to the tape. The clip is then slipped up on the tape

so that the top edge of the clip is substantially aligned with the bottom of the slat above it.

The next step is to fold the clip upwardly relative to the tape. This brings the lips 22 to the top where they extend inwardly. The section of the tape which now extends up behind the clip is slipped into the upper slot (Figure 7) to lie in front of the arms.

When the clip is in place, only the two ends show. (Figure 1). Thus, the clip does not detract from the finished appearance of the blind, since it is practically hidden from view.

With the upper section open and the lower section closed, (Figure 1) ample light is procured and at the same time, the privacy of the room is maintained. If the user wishes the light through the lower section, operation of the tilting mechanism cord will move the slats to the position shown in Figure 3. In this position, the lower section will be open for procuring a maximum amount of light through the lower section while the top section is closed. The latter is desirable in instances where the sun's rays coming through the upper section might produce a glare in the room. There are, of course, variations between these two extreme positions which will place all slats in slightly opened position despite the difference in angular positions of the slats.

Having described my invention, I claim:

1. For use in a Venetian blind including the vertical supporting tapes of the blind providing cross-supporting tapes for slats supported upon said supporting tapes; a plate element adapted to be mounted on a vertical tape and having slots therein disposed along the upper and lower margins of the plate element crosswise of the tape, said slots open to the upper and lower edges of the plate element intermediate the ends of the slots and the inner edges of said slots and adjacent edges of the respective slots being straight and unobstructed, whereby the tape may be laced through the slots, the slots being of a length corresponding to the width of the tape, and whereby the plate element may be rolled upwardly along the tape and the tape again threaded through the then uppermost slot.

2. A Venetian blind control device consisting of a plate element having marginal, longitudinal slots formed parallel with its upper and lower edges, said slots being open to said upper and lower edges at the central portions thereof and the respective inner and adjacent edges being unobstructed, whereby fingers are provided at the upper and lower edges of the element.

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